

App. No.:10/605175  
Filed: September 12, 2003  
Conf. No.:2174

Page 3 of 6

IN THE CLAIMS

1.(Currently Amended) An intermeshing gear pump comprised of an outer housing defining a pumping cavity in which a pair of intermeshing gears are journaled for pumping a fluid from a fluid inlet to said pumping cavity to a pumping outlet from said pumping cavity, said intermeshing gears having end faces at opposite sides of said gears extending perpendicularly to the rotational axes of said gears, said outer housing comprising a main body part and a pair of separate end plates affixed thereto, said main body part having an opening extending axially therethrough defining a portion of said pumping cavity facing the circumferential peripheral surfaces of said gears, said end plates each closing a respective side of said main body part opening and being in confronting relation to respective of said gear end faces for closing said pumping chamber, a groove is formed in only one side of the main body part communicating with said pumping cavity and closed by one of said end plates, said one end plate being formed with a fluid passage passing therethrough and communicating with said groove, and a fastener arrangement for affixing said end plates and said main body part together.

2. (Cancelled) An intermeshing gear pump as set forth in claim 1 wherein a fluid passage in the form of a groove is formed in one side of the main body part communicating with the pumping cavity and is closed by one of the end plates and the one of the end plates is formed with a fluid passage passing therethrough and communicating with said groove.

3. (Currently Amended) An intermeshing gear pump as set forth in claim 2 further comprising a check valved passage formed in the one end plate for providing one way fluid communication with the groove. -

4.(Original) An intermeshing gear pump as set forth in claim 3 wherein a second fluid passage in the form of a second groove is formed in one side of the main body part communicating with the pumping cavity and is closed by one of the end plates and the one of the end plates is formed with a fluid passage passing therethrough and communicating with said second groove.

5. (Original) An intermeshing gear pump as set forth in claim 4 further comprising a check valved passage formed in the one end plate for providing one way fluid communication with the second groove.

App. No.:10/605175

Page 4 of 6

Filed: September 12, 2003

Conf. No.:2174

6. (Original) An intermeshing gear pump as set forth in claim 5 wherein the groove and the second groove are formed in the same side of the main body part and are both closed by the same end plate.

7. (Original) An intermeshing gear pump as set forth in claim 1 wherein at least one of the gears is detachably supported on a shaft journaled by the end plates.

8. (Original) An intermeshing gear pump as set forth in claim 7 wherein the at least one of the gears forms a bore extending therethrough to receive the shaft, one end face of said one gear forming a slot extending perpendicularly to said bore, a coupling pin extending through said shaft and having at least one end portion received in said slot for non-rotatably coupling said shaft and said one gear.

9. (Original) An intermeshing gear pump as set forth in claim 7 both of the gears are detachably supported on respective shafts journaled in the end plates, each of said gears being formed with a bore extending therethrough to receive the respective shaft, one end face of each of said gears forming a respective slot extending perpendicularly to its bore, a pair of coupling pins each extending through a respective one of said shafts and having at least one end portion received in its slot for non-rotatably coupling the respective of said shafts and said gears.

10. (Original) An intermeshing gear pump as set forth in claim 1 wherein at least one of the end plates is in direct engagement with the respective gear end faces.

11. (Original) An intermeshing gear pump as set forth in claim 10 wherein both of the end plates are in direct engagement with the respective gear end faces.

12. (Currently Amended) An intermeshing gear pump comprised of an outer housing defining a pumping cavity in which a pair of intermeshing gears are journaled for pumping a fluid from a fluid inlet to said pumping cavity to a pumping outlet from said pumping cavity, said intermeshing gears having end faces extending perpendicularly to the rotational axes of said gears at at least one side of said gears, said outer housing comprising a main body part defining at least in part said pumping cavity and an end plate affixed thereto and closing said pumping cavity, at least one of said gears forming a bore extending therethrough to receive a shaft, said end face of said one gear forming a slot extending perpendicularly to said bore and of a depth less than the thickness of said one gear, a coupling pin extending through said shaft and having at least one end portion received in said slot for non-rotatably coupling said shaft and said one gear.

App. No.:10/605175

Filed: September 12, 2003

Conf. No.:2174

Page 5 of 6

13. (Original) An intermeshing gear pump as set forth in claim 12 wherein at least one of the end plates is in direct engagement with the respective gear end faces for retaining the pin in the slot.

14. (Original) An intermeshing gear pump as set forth in claim 12 wherein both of the gears forming a bore extending therethrough to receive a shaft, one end face of each of said gears forming a slot extending perpendicularly to the respective bore, a pair of coupling pins each extending through a respective of said shafts and having at least one end portion received in the slot thereof for non-rotatably coupling said shafts and said gears.

15. (Original) An intermeshing gear pump as set forth in claim 14 wherein at least one of the end plates is in direct engagement with the respective gear end faces for retaining the pins in the slots.

16.(Cancelled) An intermeshing gear pump comprised of an outer housing defining a pumping cavity in which a pair of intermeshing gears are journalled for pumping a fluid from a fluid inlet to said pumping cavity to a pumping outlet from said pumping cavity, said intermeshing gears having end faces extending perpendicularly to the rotational axes of said gears at opposite sides of said gears, said outer housing comprising a main body part and a pair of separate end plates affixed thereto, said main body part having an opening extending axially there through defining a portion of said pumping cavity facing the circumferential peripheral surfaces of said gears, said end plates each closing a respective side of said main body part opening and being in direct engaging relationship to respective of said gear end faces for closing said pumping chamber, and a fastener arrangement for affixing said end plates and said main body part together.

17. (Cancelled)

18-29. (Withdrawn)